

Exhibit No.:
Issues: RSM, Pension and OPEB Expense
Witness: John M. Watkins
Exhibit Type: Surrebuttal
Sponsoring Party: Missouri-American Water Company
Case No.: WR-2017-0285
SR-2017-0286
Date: January 24, 2018

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2017-0285
CASE NO. SR-2017-0286

SURREBUTTAL TESTIMONY

OF

JOHN M. WATKINS

ON BEHALF OF

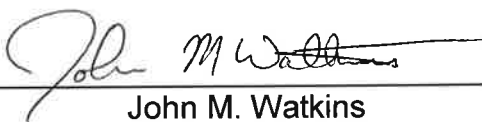
MISSOURI-AMERICAN WATER COMPANY

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

IN THE MATTER OF MISSOURI-AMERICAN) WATER COMPANY FOR AUTHORITY TO) FILE TARIFFS REFLECTING INCREASED) RATES FOR WATER AND SEWER) SERVICE)	CASE NO. WR-2017-0285 CASE NO. SR-2017-0286
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AFFIDAVIT OF JOHN M. WATKINS

John M. Watkins, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of John M. Watkins"; that said testimony and schedules were prepared by him and/or under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge.



John M. Watkins

**State of New Jersey
County of Camden
SUBSCRIBED and sworn to
Before me this 7th day of FEBRUARY 2018.**



Notary Public

My commission expires:

**ANN G. ALFANO
NOTARY PUBLIC OF NEW JERSEY
ID # 50014130
My Commission Expires 4/15/2020**

**SUREBUTTAL TESTIMONY
JOHN M. WATKINS
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR-2017-0285
CASE NO. SR-2017-0286**

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SURREBUTTAL TESTIMONY

1

JOHN M. WATKINS

2

I. INTRODUCTION

3 **Q. Please state your name and business address.**

4 A. My name is John M. Watkins and my business address is 131 Woodcrest Road, Cherry
5 Hill, New Jersey 08003.

6 **Q. Are you the same John M. Watkins who previously submitted direct testimony in
7 this proceeding on behalf of Missouri-American Water Company (“MAWC” or
8 the “Company”)?**

9 A. Yes.

10 **Q. What is the purpose of your surrebuttal testimony in this proceeding?**

11 A. The purpose of my surrebuttal testimony is to address certain comments made by
12 various witnesses in their rebuttal testimony in regards to the proposed Revenue
13 Stabilization Mechanism (“RSM”). I will also addresses an update and proposed
14 accounting change to pension and Other Post Employment Benefit (OPEBs).

15 **II. REVENUE STABILIZATION MECHANISM**

16 **Q. On page 4 of Staff witness James Busch’s rebuttal testimony, he states that the
17 “Staff does not agree that there are errors inherent in determining test year sales.”
18 Has the Company conducted an analysis on the usage levels proposed for purposes
19 of establishing test year sales during rate case proceeding and the usage levels
20 actually experienced by the Company?**

1 A. Yes, attached to my surrebuttal testimony as Schedule JMW-4 is a line graph which
2 depicts Staff's as filed position, the Company's as filed position and actual results
3 based off of consumption levels. Schedule JMW-4 is a visual depiction of the inherent
4 errors in setting test year sales.

5 **Q. How do Staff's as-filed usage levels in each rate case since 2007 compare to the**
6 **Company's actual usage levels for each year?**

7 A. Staff's as-filed positions have consistently reflected unrealistically high and unrealized
8 levels of consumption for every year except the unusually hot, drought year of 2012.
9 Since 2007, the Company only experienced actual consumption higher than Staff's
10 projection in that one drought year (2012). The other 10 years are below Staff's
11 projections, and in 8 of the 10 years the variance was over 3.8 billion gallons with 6 of
12 the 10 years having a variance of approximately 5 billion gallons or more. The average
13 variance of the 10 years that are below Staff's projections is over 5 billion gallons per
14 year. Over the past eleven years, the Company has sold over 48 billion gallons less
15 than what Staff predicted. This is an average deficit of approximately 4.4 billion
16 gallons in sales per year. For example, during calendar year 2009, the Company had
17 actual usage of 58,141,186 thousand gallons, whereas Staff's direct case in Case No.
18 WR-2008-0311 had projected usage of 68,022,521 thousand gallons. This results in a
19 variance of 9,881,335 thousand gallons, or approximately 14.5% lower than Staff's
20 projection.

21 **Q. Are the Company's projections more accurate when compared to actuals?**

22 A. Yes, but there are still large variances between actual usage and the Company's
23 projections. For that same period (2007-2017), the Company projected it would sell

1 approximately 686 billion gallons, while actual sales were 656 billion gallons, which
2 is 30 billion gallons less than the Company's own projections. This is an average
3 deficit of approximately 2.7 billion gallons in sales per year. For example, the
4 Company's proposed consumption level in Case No. WR-2008-0311 was 66,475,503
5 thousand gallons, which had a variance of 8,334,317 thousand gallons when compared
6 to 2009 actuals. While the Company's projections were more accurate than Staff's
7 projections, they still resulted in a significant variance between projected and actual
8 consumption.

9 **Q. Is there a way to effectively address the fact that forecasted usage generally does**
10 **not result in the Company achieving its or Staff's proposed level of consumption**
11 **and revenues?**

12 A. Yes, the adoption of the RSM would remedy that problem. It solves the forecasting
13 issues of both the Company and Staff.

14 **Q. Staff witness Busch states on page 4 lines 12-13 of his rebuttal testimony that**
15 **“[t]he regulatory process smooths out these fluctuations through the process of**
16 **normalization.” Do you agree?**

17 A. No, as can be seen from Schedule JMW-4, the regulatory process has not smoothed out
18 the fluctuations when compared to Staff's or the Company's positions. Neither Staff
19 nor the Company has determined a way to predict the year to year changes in
20 consumption due to weather. Even if by some miracle the Company or Staff were to
21 come close to the actual level of consumption in one year, based on how drastic the
22 consumption levels can change due to weather, it is extremely unlikely that the same
23 level of consumption would be repeated year after year.

1 **Q. Have you analyzed the dollar impact?**

2 A. Yes, Schedule JMW-3, filed with my direct testimony, and the updated Schedule JMW-
3 3, filed with this surrebuttal testimony, shows what the over/under collection of
4 revenues net of production costs would have been for the Company from 2007-2017.

5 **Q. What was updated in Schedule JMW-3?**

6 A. The Company updated the information to include 2017.

7 **Q. What do the updated Schedule JMW-3 and Schedule JMW-4 show?**

8 A. The updated Schedule JMW-3 shows that from 2007-2017 the Company collected
9 more revenues net of production costs in only 2 out of 11 years. In total for the 11
10 years, the actual dollars were less than the authorized net of production costs by over
11 \$99 million or an average of over \$9 million per year. Schedule JMW-4 shows that the
12 consumption levels projected by Staff were exceeded just once out of 11 years with a
13 cumulative variance of 48 billion gallons when comparing Staff's projections to actual
14 sales. Together, these schedules show that the Company would need to exceed the
15 authorized levels of consumption if it were to achieve or exceed the authorized level of
16 revenues net of production costs.

17 **Q. Mr. Busch points to the Iowa-American Water Company Docket No. RPU-2016-**
18 **002 in his rebuttal testimony as an example of a recent case where a RSM was**
19 **not adopted. Has any State Commission authorized a revenue stabilization**
20 **mechanism within the same timeframe?**

21 A. Yes, the Illinois Commerce Commission ("ICC") authorized a revenue stabilization
22 mechanism called the Volume Balancing Adjustment Rider ("VBA Rider") for Illinois-
23 American Water Company in December 2016. *See Order, Illinois-American Water*

1 *Company Proposed Rate Increases for Water and Sewer Service*, Case No. 16-0093
2 (Dec. 13, 2016)(“ICC Order”).

3 **Q. Please elaborate.**

4 A. On page 72 of the ICC Order, the ICC stated the following regarding the VBA Rider:

5 The Commission finds that IAWC’s Rider VBA is reasonable and
6 appropriate in these circumstances. The record supports the Company’s
7 assertion that most of its costs are fixed and that it is experiencing both
8 declining and variable usage. Additionally, IAWC has established that
9 both weather and declining usage per customer has caused its sales
10 volumes and revenues to vary from approved levels. While there is
11 nothing wrong with traditional ratemaking, the Commission has
12 determined in Docket Nos. 07-0241/07-0242 (Consol.), Docket Nos.
13 11-0280/11-0281 (Consol.), and recently in Docket No. 15-0142, that
14 decoupling mechanisms such as Rider VBA address these cost recovery
15 issues.

16
17 The Commission notes that under traditional ratemaking, the Company
18 relies on volumetric charges to recover the majority of its costs. Thus,
19 IAWC’s cost recovery is heavily dependent on water sales volume
20 which can be problematic because declining usage can drive IAWC’s
21 sales volumes, and therefore revenues, below the point where the utility
22 has a reasonable opportunity to recover its costs. The Company’s
23 dependence on volumetric sales for revenue creates an incentive to sell
24 more water and a disincentive to promote water efficiency.

25
26 The Commission believes Rider VBA resolves these issues by
27 producing a determined amount of revenue regardless of how much
28 water a utility delivers, and therefore it ensures that the utility can
29 recover its Commission-authorized revenue requirement. Rider VBA
30 also removes the incentive to sell more water and any disincentive to
31 promote water efficiency, reduces the adverse impacts of weather
32 variability for both IAWC and its customers, and supports revenues for
33 programs and investments that improve water efficiency. The rider also
34 benefits IAWC’s customers because it allows for periodic adjustments
35 (credits and surcharges) in between rate cases therefore the Company
36 will not need to file frequent rate cases to recover revenue shortfalls
37 resulting from declining sales. IAWC customers will also benefit from
38 reduced rate case expense because there will be a reduction in contested
39 issues in rate cases and a reduction in the frequency of rate cases.

40
41 **Q. OPC witness Marke, states on page 10 of his rebuttal testimony that “[a]**
42 **decoupling mechanism could also be an appropriate regulatory tool to be utilized**

1 **during extreme, extended periods of conservation rationing (e.g., the Southern**
2 **California drought (2012-2017)).” When did California American receive**
3 **authorization for its Revenue Adjustment Mechanism and Modified Cost**
4 **Balancing Account (“WRAM/MCBA”)?**

5 A. California-American received authorization in 2008 for its WRAM/MCBA, which is
6 well before the extended period of drought referenced by OPC.

7 **Q. Was the Illinois VBA Rider authorized due to drought?**

8 A. No. Illinois-American had a very similar schedule compared to Schedule JMW-3 and
9 the updated Schedule JMW-3 in this case. In Illinois’ case, the timeframe analyzed
10 was 2009-2015 and each year’s sales fell short of the authorized amount ranging from
11 a low of \$664,000 to a high of \$15.3 million. In addition, the ICC authorized a VBA
12 Rider not only for the water customers but also for the wastewater customers.

13 **Q. If the Commission were to determine it did not want to implement a**
14 **surcharge/credit mechanism, can the Commission still approve an RSM?**

15 A. Yes. While implementing an RSM as a surcharge/credit mechanism with an annual
16 reconciliation is the best alternative,¹ some of the benefits of an RSM can still be
17 achieved through a revenue tracker. The Company would propose a revenue tracker
18 where the reconciliation of the regulatory asset or liability is deferred and addressed in
19 the next general rate case. I discussed this potential alternative in my direct testimony
20 on pages 11 and 12.

¹ “The advantage of an annual reconciliation is the annual surcharge or credit addresses the shortfall or over collection of net revenues in a timely manner instead of accumulating multiple years together and then amortizing it over a longer period of time. Also, incorporating any surcharge or credit into base rates by deferring and amortizing would mask or hide any impact to the customer and not drive water efficiency or effective pricing signals.” Watkins Dir., p. 11-12.

1 **Q. Please describe the specific accounting treatment for the RSM.**

2 A. As stated in my direct testimony, each month the Company would compare the actual
3 metered revenues for the applicable customer classes to the amount of authorized
4 revenues for the applicable classes. MAWC would also compare the actual production
5 costs to the authorized amount of production costs associated with the applicable
6 customer classes. If the actual revenues fall short of the authorized revenues, the
7 difference in the revenue less the production costs would be deferred to a regulatory
8 asset. If the actual revenues were more than the authorized revenues, the difference in
9 the revenue less the production costs would be deferred to a regulatory liability.
10 Generally speaking, if the Company has additional revenues due to an increase in water
11 sales, the Company will defer the additional revenue, less the additional cost to produce
12 the water, to a regulatory asset. Whereas, if water sales are lower, then the Company
13 has a shortfall in revenues due to a decrease in water sales, the Company will accrue
14 the shortfall in revenues less the savings in production expense from producing less
15 water, to a regulatory liability.

16 **Q. Would the RSM work the same way if it was a revenue tracker?**

17 A. Yes, the mechanics and calculations would be the same except the annual reconciliation
18 would not occur. Instead the balances would be deferred until the next rate case and
19 then amortized over a period of time.

20 **Q. In his rebuttal testimony, Water District Intervenors witness Donald Johnstone**
21 **does not support the application of the RSM to sale for resale customers. Do you**
22 **agree?**

1 A. No. Most sale for resale customers are buying water to supplement their own supply
2 of water that they sell to their customers. Typically this includes residential,
3 commercial and other customer classes, which are also included in the Company's
4 proposed RSM. Therefore, sale for resale customers should remain as part of the RSM
5 as proposed by the Company.

6 **Q. Which customer classes are included in the proposal for RSM?**

7 A. The Company proposed to include customer classes of residential, commercial, other
8 public authorities ("OPA") and sale for resale for both water and sewer. The
9 Company's position was that customers in Rate A and Rate B should be included in
10 the RSM excluding the industrial class.

11 **Q. Does this position exclude any additional customers from the as-proposed
12 position that the Company filed?**

13 A. Yes, the Company excluded the industrial class of customers in the original filing.
14 The Company is now proposing to exclude the industrial class and any Rate J
15 customers.

16 **III. PENSION AND OPEB EXPENSE**

17 **Q. Has the Financial Accounting Standards Board ("FASB") issued any standards
18 regarding retirement benefits, specifically those related to pension and other post-
19 retirement benefits?**

20 A. Yes. FASB's Accounting Standards Update for Compensation – Retirement Benefits
21 (Topic 715), was issued in March 2017 ("Update"), which amends the presentation of
22 net periodic benefit cost for pension and other post-retirement benefits, with an
23 effective date for annual periods beginning after December 15, 2017.

1 **Q. Did the Company propose any changes in its case filed on June 30, 2017?**

2 A. At the time of the filing, the Company was still reviewing its options and determining
3 the best method for complying with GAAP starting in 2018, so it proposed the
4 traditional method that capitalizes the entire pension and OPEB amount.

5 **Q. What will the accounting treatment be for GAAP purposes?**

6 A. For GAAP purposes, the service cost component of pension and OPEB will continue
7 to be capitalized as it has in the past. The non-service components, which include
8 interest cost, return on plan assets, gains/losses, prior service cost, transition
9 asset/obligation and gains/losses on settlement or curtailment, will no longer be
10 capitalized.

11 **Q. Would the current proposed regulatory treatment in this case require the
12 Company to maintain separate books?**

13 A. Yes. If the current proposed treatment is maintained, the Company would need to
14 maintain two sets of books, one for regulatory purposes and one for GAAP purposes.

15 **Q. Have other companies addressed this issue in rate cases yet?**

16 A. The Company is not currently aware of any open rate cases where this issue has been
17 addressed. FERC did issue a statement which the Company received through auditors
18 that stated:

19 The FERC Accounting Staff notified us that they had additional discussions
20 with the FERC Rate Staff and have decided that EEI/AGA member companies
21 can elect to change their capitalization policy to capitalize only service cost for
22 FERC accounting and reporting purposes consistent with ASC 715 or
23 companies can elect to continue to capitalize all the components of net benefit
24 cost. Companies are not required to seek approval from the FERC Accounting
25 or Rate Staff for changing their capitalization policy with the following
26 conditions:

- Companies must make this election only once upon implementing ASC 715 – no switching will be allowed once the election is made
- If a company decides to elect to capitalize only service cost, the company must disclose the change in its Form No. 1 or 2 and in any formula rate update filings with FERC, including the ratemaking impact of the change for all jurisdictions and for FERC jurisdictional formula rates
 - i. If the change will result in an immediate increase in FERC jurisdictional formula rates, the FERC Accounting Staff advised that the company should discuss the change with its customers since the customers could protest the change

Q. Has this issue been addressed for any of MAWC’s regulated affiliates yet?

A. Yes, the Public Service Commission of New York issued an Order on December 14, 2017, in Case 17-M-0363, for all utilities that stated in its conclusion (page 8):

we adopt the FASB Update for Compensation – Retirement benefits (Topic 715), as it relates to not capitalizing non-service components of pension/OPEB costs. For ratemaking and Commission accounting and reporting purposes, non-service costs will continue to be accounted for above-the-line as part of operating income. The companies should implement the Update for regulatory accounting and reporting purposes coincident with their adoption of the Update for GAAP reporting purposes.

Q. Has the Company analyzed the new methodology for use in this case?

A. Yes, the Company has performed a comparison of the Company’s as-filed position to its updated position, which includes updated actuarial data for 2018² and reflects the traditional approach as well as the Company’s proposed change in methodology. The left side of Schedule JMW-5, attached hereto, shows the as filed numbers for the calendar year 2017, the twelve months ending May 31, 2018 and the rate year ending May 31, 2019. The right side of Schedule JMW-5 shows updated 2018 numbers from

² The Company received an update from Willis Towers Watson on January 24, 2018, in regards to the forecasts to book for the calendar year 2018 for pension and OPEBs.

1 Willis Towers Watson, which are then used to calculate the pension and OPEB expense
2 under the traditional approach as well as under the new GAAP methodology.

3 **Q. How does the new forecast compare to the as-filed numbers?**

4 A. For pension expense, the traditional method is \$3,012,741 whereas the GAAP method
5 would be \$3,490,825. The as-filed rate year ending May 31, 2019 had an expense of
6 \$3,252,140. For OPEB expense, the traditional method is a negative \$297,266,
7 whereas the GAAP method would be a negative \$1,064,964. The as-filed rate year
8 ending May 31, 2019 had an expense of \$289,059. Netting the pension and OPEB
9 expense together shows that the filing of \$1,699,367 (\$2,712,248-\$1,012,881) would
10 be reduced to \$535,477 (\$2,907,865-\$2,372,388) based on the latest information from
11 Willis Towers Watson.

12 **Q. Does the Company have updated service and non-service costs for 2019?**

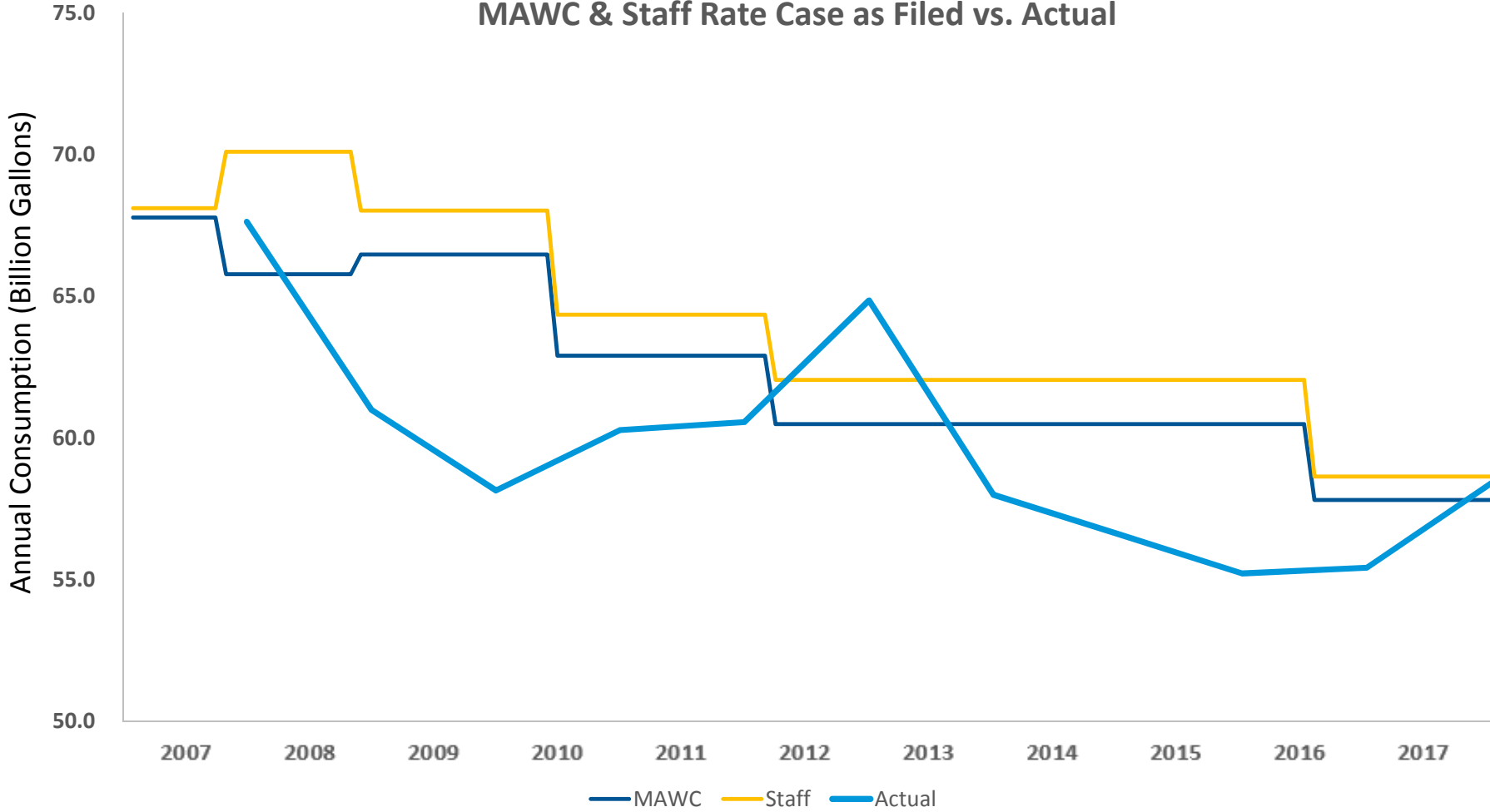
13 A. No, the Company is using the latest forecast from Willis Towers Watson for 2018 for
14 forecasting the 12 months ended May 31, 2019.

15 **Q. Does this conclude your surrebuttal testimony?**

16 A. Yes, it does.

	Schedule JMW-3 Updated										
Authorized Revenues (1)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	\$145,679,828	\$173,186,571	\$197,280,769	\$206,532,238	\$213,962,106	\$232,142,413	\$237,054,075	\$237,054,075	\$237,054,075	\$247,349,919	\$258,553,015
Sewer	111,479	459,306	564,469	1,114,166	1,558,273	2,668,437	2,969,039	2,969,039	2,969,039	5,301,244	7,838,959
	<u>\$145,791,307</u>	<u>\$173,645,877</u>	<u>\$197,845,238</u>	<u>\$207,646,404</u>	<u>\$215,520,379</u>	<u>\$234,810,850</u>	<u>\$240,023,114</u>	<u>\$240,023,114</u>	<u>\$240,023,114</u>	<u>\$252,651,163</u>	<u>\$266,391,974</u>
Actual Revenues	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	\$147,187,689	\$155,236,743	\$176,814,412	\$192,614,238	\$207,389,279	\$243,652,841	\$229,023,141	\$227,138,052	\$218,000,520	\$233,128,505	\$259,688,899
Sewer	109,743	418,503	584,552	725,300	1,637,183	2,711,814	3,034,304	3,012,739	3,043,806	5,539,309	8,846,470
	<u>\$147,297,432</u>	<u>\$155,655,246</u>	<u>\$177,398,964</u>	<u>\$193,339,538</u>	<u>\$209,026,462</u>	<u>\$246,364,655</u>	<u>\$232,057,445</u>	<u>\$230,150,791</u>	<u>\$221,044,326</u>	<u>\$238,667,814</u>	<u>\$268,535,369</u>
Variance - Surcharge (Credit)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	(\$1,507,861)	\$17,949,828	\$20,466,357	\$13,918,000	\$6,572,827	(\$11,510,428)	\$8,030,934	\$9,916,023	\$19,053,555	\$14,221,414	(\$1,135,884)
Sewer	1,736	40,803	(20,083)	388,866	(78,910)	(43,377)	(65,265)	(43,700)	(74,767)	(238,065)	(1,007,511)
	<u>(\$1,506,125)</u>	<u>\$17,990,631</u>	<u>\$20,446,274</u>	<u>\$14,306,866</u>	<u>\$6,493,917</u>	<u>(\$11,553,805)</u>	<u>\$7,965,669</u>	<u>\$9,872,323</u>	<u>\$18,978,788</u>	<u>\$13,983,349</u>	<u>(\$2,143,395)</u>
Note (1): Classes of customers include Residential, Commercial, OPA and Sale for Resale											
Authorized Production Costs (1)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	\$12,345,504	\$14,684,085	\$18,474,873	\$18,739,529	\$18,952,075	\$20,004,431	\$20,288,740	\$20,288,740	\$20,288,740	\$20,018,222	\$19,723,865
Sewer	12,450	83,007	111,156	128,559	142,535	219,038	239,706	239,706	239,706	909,967	1,639,293
	<u>\$12,357,954</u>	<u>\$14,767,092</u>	<u>\$18,586,029</u>	<u>\$18,868,088</u>	<u>\$19,094,610</u>	<u>\$20,223,469</u>	<u>\$20,528,446</u>	<u>\$20,528,446</u>	<u>\$20,528,446</u>	<u>\$20,928,189</u>	<u>\$21,363,158</u>
Actual Production Costs	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	\$15,368,394	\$15,607,118	\$17,215,075	\$18,409,894	\$19,140,166	\$20,275,212	\$19,050,403	\$19,792,061	\$20,132,948	\$20,542,707	\$20,418,115
Sewer	95,533	141,707	114,124	134,483	228,851	787,771	232,540	532,769	934,841	1,295,278	1,642,132
	<u>\$15,463,927</u>	<u>\$15,748,825</u>	<u>\$17,329,199</u>	<u>\$18,544,377</u>	<u>\$19,369,017</u>	<u>\$21,062,983</u>	<u>\$19,282,943</u>	<u>\$20,324,830</u>	<u>\$21,067,789</u>	<u>\$21,837,985</u>	<u>\$22,060,248</u>
Production Costs Variance - Surcharge (Credit)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	\$3,022,890	\$923,033	(\$1,259,798)	(\$329,635)	\$188,091	\$270,781	(\$1,238,337)	(\$496,679)	(\$155,792)	\$524,485	\$694,250
Sewer	83,083	58,700	2,968	5,924	86,316	568,733	(7,166)	293,063	695,135	385,311	2,839
	<u>\$3,105,973</u>	<u>\$981,733</u>	<u>(\$1,256,830)</u>	<u>(\$323,711)</u>	<u>\$274,407</u>	<u>\$839,514</u>	<u>(\$1,245,503)</u>	<u>(\$203,616)</u>	<u>\$539,343</u>	<u>\$909,796</u>	<u>\$697,090</u>
Revenues net of Expenses Variance - Surcharge (Credit)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Water	\$1,515,029	\$18,872,861	\$19,206,559	\$13,588,365	\$6,760,918	(\$11,239,647)	\$6,792,597	\$9,419,344	\$18,897,763	\$14,745,899	(\$441,634)
Sewer	84,819	99,503	(17,115)	394,790	7,406	525,356	(72,431)	249,363	620,368	147,246	(1,004,672)
	<u>\$1,599,848</u>	<u>\$18,972,364</u>	<u>\$19,189,444</u>	<u>\$13,983,155</u>	<u>\$6,768,324</u>	<u>(\$10,714,291)</u>	<u>\$6,720,166</u>	<u>\$9,668,707</u>	<u>\$19,518,131</u>	<u>\$14,893,145</u>	<u>(\$1,446,306)</u>

Consumption Analysis MAWC & Staff Rate Case as Filed vs. Actual



Missouri American Water Company
Pension / PBOP Analysis

Schedule JMW-5

Pension - As Filed

	2017	RYE 5/31/2018	RYE 5/31/2019
Pension	\$6,982,081	\$6,049,100	\$5,635,996
MAWC Cap Rate	42.30%	42.30%	42.30%
Total Capitalized Pension	<u>\$2,953,209</u>	<u>\$2,558,587</u>	<u>\$2,383,856</u>
Total Pension Expense	<u>\$4,028,871</u>	<u>\$3,490,513</u>	<u>\$3,252,140</u>

PBOP - As Filed

	2017	RYE 5/31/2018	RYE 5/31/2019
PBOP	\$808,378	\$583,880	\$500,943
MAWC Cap Rate	42.3%	42.3%	42.3%
Total Capitalized PBOP	<u>\$341,920</u>	<u>\$246,964</u>	<u>\$211,884</u>
Total Expensed PBOP	<u>\$466,459</u>	<u>\$336,916</u>	<u>\$289,059</u>
Total Pension & PBOP Expense	<u>\$4,495,330</u>	<u>\$3,827,430</u>	<u>\$3,541,199</u>

Pension - As Filed

	2017	RYE 5/31/2018	RYE 5/31/2019
Total Pension Expense			
Pension Expense	\$4,028,871	\$3,490,513	\$3,252,140
Amortization of Tracker	<u>(723,181)</u>	<u>(539,892)</u>	<u>(539,892)</u>
Total Expensed Pension	<u>\$3,305,690</u>	<u>\$2,950,621</u>	<u>\$2,712,248</u>
Total PBOP Expense			
PBOP Expense	\$466,459	\$336,916	\$289,059
Amortization of Tracker	<u>(1,294,957)</u>	<u>(1,301,940)</u>	<u>(1,301,940)</u>
Total Expensed PBOP	<u>(\$828,498)</u>	<u>(\$965,024)</u>	<u>(\$1,012,881)</u>
Total Pension and PBOP expense			<u>\$1,699,367</u>

Pension - Revised Surrebuttal

	Traditional 2018	ASC 715 2018		
		Service	Non-Service	Total
Pension	\$5,329,456	\$4,229,654	1,099,801	\$5,329,456
Capitalization Rate - Revised per Rebuttal	43.47%	43.47%		
Total Capitalized Pension	\$2,316,714	\$1,838,631	\$0	\$1,838,631
Total Expensed Pension	<u>\$3,012,741</u>	<u>\$2,391,024</u>	<u>\$1,099,801</u>	<u>\$3,490,825</u>

PBOP - Revised Surrebuttal

	2018	2018		
		Service	Non-Service	Total
PBOP	(\$525,855)	\$1,240,185	(\$1,766,040)	(\$525,855)
Capitalization Rate - Revised per Rebuttal	43.47%	43.47%		
Total Capitalized PBOP	(\$228,589)	\$539,109	\$0	\$539,109
Total Expensed PBOP	<u>(\$297,266)</u>	<u>\$701,077</u>	<u>(\$1,766,040)</u>	<u>(\$1,064,964)</u>
Total Pension & PBOP Expense	<u>\$2,715,476</u>	<u>\$3,092,100</u>	<u>(\$666,239)</u>	<u>\$2,425,861</u>

Pension - Revised Surrebuttal

	Traditional 2018	ASC 715 2018		
		Service	Non-Service	Total
Total Pension Expense				
Pension Expense	\$3,012,741	\$2,391,024	\$1,099,801	\$3,490,825
Amortization of Tracker	<u>(582,960)</u>	<u>(582,960)</u>		<u>(582,960)</u>
Total Expensed Pension	<u>\$2,429,781</u>	<u>\$1,808,064</u>	<u>\$1,099,801</u>	<u>\$2,907,865</u>
Total PBOP Expense				
PBOP Expense	(\$297,266)	\$701,077	(\$1,766,040)	(\$1,064,964)
Amortization of Tracker	<u>(1,307,424)</u>	<u>(1,307,424)</u>		<u>(1,307,424)</u>
Total Expensed PBOP	<u>(\$1,604,690)</u>	<u>(\$606,347)</u>	<u>(\$1,766,040)</u>	<u>(\$2,372,388)</u>
Total Pension and PBOP expense	<u>\$825,092</u>			<u>\$535,477</u>